

REMARKS

In part 12 of the Office Action Summary, none of the boxes are checked. However, applicants filed a certified copy of the priority document on 3 September 2003, as indicated on the filing transmittal for this application. A check of the PAIR system on 12 October 2007 showed that the priority document was received. Therefore, the applicants respectfully request acknowledgement of the claim for priority under section 119 and notice that the certified copy of the priority document has been received.

The applicants thank the examiner for having returned an initialed copy of the PTO 1449 that was submitted on 3 September 2003.

Claims 1 - 7 are pending. New claim 7 is presented for examination. The applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claim 1 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The applicants respectfully request that this rejection be withdrawn for the following reasons.

The examiner has asserted that the recitation of "signal data sent by other than the signal processing unit" is unclear as to what other device and what other signal is being pointed to. The applicants have accordingly amended claim 1 to delete this particular recitation.

The examiner has also asserted that the relation between the above signal and internal data, and how it is associated with command data, which is sent to the output processing unit and monitoring unit is unclear. The applicants have accordingly amended claim 1 to recite: "the computation processing unit executes a predetermined computation based on the signal data sent by the signal processing unit, and then sends (i) operation command data to an output processing unit for activating an operation command target including at least one of an actuator and a load."

The relationship between the signal data and the operation command data is clear. The recitation of internal data has been deleted.

Therefore, because claim 1, as amended, recites clear and definite subject matter, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. 112, second paragraph be withdrawn.

Claims 1 - 3 and 5 - 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Publication No. 10-326109 to Sakai in view of U.S. Patent No. 5,838,873 to Darby. The applicants respectfully request that this rejection be withdrawn for the following reasons.

Claim 1 recites novel features associated with an exemplary embodiment described, for example, on pgs. 9 - 11 in which a control system includes a computation processing unit 2A that executes a predetermined computation based on the signal data sent by the signal processing unit 1A, and then sends (i) operation command data to an output processing unit 3A for activating an operation command target including at least one of an actuator and a load. As described on, for example, pg. 14, the computation processing unit 2A also sends (ii) operation condition data, which indicates that condition where an operation command trigger for activating the operation command target has been effected, to the monitor processing unit, the operation condition data corresponding to the signal data based on which the computation processing unit has executed the predetermined computation.

In one exemplary case, the control system can be implemented with respect to a door lock system in which signal data including a door lock command is generated when a signal system such as a sensor determines that the vehicle speed is greater than a predetermined speed or another signal system such as door lock switch is activated. The signal systems send the signal data to the computation device 2 and a monitor device 4. The computation device 2 in turn sends

operation command data for activating the door lock to the output device 2 (or actuator) for actuating the door lock. The computation device 2 also sends operation trigger data indicative of which of the signal systems generated the signal data (for example, sensor or switch) and operation condition data (e.g., door lock switch activated or high vehicle speed) to the monitor device 4. Thereby, the monitoring device 4 can determine errors (abnormalities) by comparing the signal data received from the signal systems with operation data received from the computation device 2 without knowing the contents of the computation function in the CPU. (See pgs. 19 - 20 and 24).

On the other hand, without conceding that Sakai discloses any of the limitations of claim 1, Sakai is directed to a pump yard remote monitoring system. According to Sakai, a data terminal includes first data collection means for collecting operation condition data (first data) containing the water level of the pump machine and second data collection means for collecting and holding the operational status data (second data) of pump machine equipment. A malfunction detection means detects abnormalities in the first and second data which is collected by a transmitting means.

However, as conceded by the Examiner, Sakai fails to teach or suggest that either data includes condition data, which indicates that condition where an operation command trigger for activating the operation command target has been effected.

Further, Sakai fails to teach or suggest determining whether abnormality is present by comparing the first and second data. Rather, referring to paragraph [0015], when performing fault detection processing, the arithmetic unit 2 uses a measurement signal (See Fig. 3 of Sakai and attached Exhibit A) which is, for example, a detection result of an operation after being

activated by an operation command signal. That is, Sakai describes using data from actual operation rather than comparing the first and second data.

The examiner has cited Darby in order to cure the deficient teachings of Sakai. Darby describes a vehicle safety system 100 including a plurality of safety device controllers 200 controlling safety device activation. Each of the safety device controllers 200 communicates with an electronic control unit (ECU) 300 which includes an ECU communication interface 320 and an ECU diagnostic port interface 350. The ECU communication interface 320 also comprises a means for receiving integrity data and fault warning messages from the safety device controllers 200 over the communication bus 500. The ECU diagnostic port interface 350 comprises a means for an external device to perform service diagnostic tests on the vehicle safety system 100. This includes reading the contents of the ECU memory 360, performing diagnostic tests on the electronic control unit (ECU) 300, causing the safety device controllers 200 to perform diagnostic tests on themselves by collecting integrity data and generating fault warning messages, and accessing integrity data and fault warning messages from the safety device controllers 200.

The examiner has asserted that Darby discloses operation command data and, particularly, operation condition data indicating that condition where an operation trigger that activated an operation command target is affected. The applicants respectfully disagree, as Darby, in the contrary, describes in Col. 14, Lines 15 - 25 that the safety device controller 200 includes a SDC diagnostic circuit 250 for reading safety device controller integrity data, and an SDC control circuit 210. When the SDC control circuit receives an integrity data command from the SDC communication interface, it reads the safety device controller integrity data from the SDC diagnostic circuit 250, compares the safety device integrity data with predetermined limit values, and generates fault warning messages if the predetermined limit values are exceeded. Then the

safety device integrity data and any generated fault warning messages are sent to the communication bus 500 by the SDC communication interface 220. However, the safety data integrity data or any other data does not include operation condition data, which indicates that condition where an operation command trigger for activating the operation command target has been effected as recited in amended claim 1.

Further, assuming *arguendo* that the safety integrity data constitutes the recited operation condition data, Darby fails to teach or suggest that the ECU communication interface 320 or the SDC control circuit of the safety device controller 200 determines whether abnormality is present, by comparing stored signal data from the controller 200 with the operation condition data received from the computation processing unit.

Therefore, because Darby and Sakai fail to teach or suggest a computation processing unit which sends operation condition data, which indicates that condition where an operation command trigger for activating the operation command target has been effected, to the monitor processing unit, the operation condition data corresponding to the signal data based on which the computation processing unit has executed the predetermined computation, and wherein the monitor processing unit determines whether abnormality is present, by comparing the stored signal data with the operation condition data received from the computation processing unit, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. 103(a) be withdrawn.

Claims 2 – 3 and 5 – 6 depend from claim 1. Therefore, the rejection of these claims should be withdrawn for at least the above-mentioned reasons with respect to claim 1.

Claim 4 was rejected under 35 U.S.C. 103(a) as being unpatentable over Publication No. 10-326109 to Sakai in view of U.S. Patent No. 5,838,873 to Darby and further in view of U.S.

Patent No. 6,321,150 to Nitta. Claim 4 depends from claim 1. Therefore, the rejection of claim 4 should be withdrawn for at least the above-mentioned reasons with respect to claim 1.

New claim 7 is presented for examination. Support for new claim 7 can be found on, for example, pgs. 19 - 24.

In view of the foregoing, the applicants submit that this application is in condition for allowance. A timely notice to that effect is respectfully requested. If questions relating to patentability remain, the examiner is invited to contact the undersigned by telephone.

If there are any problems with the payment of fees, please charge any underpayments and credit any overpayments to Deposit Account No. 50-1147.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kerry S. Culpepper", written over a horizontal line.

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